REMARKS

In the Office Action dated November 20, 2006, claims 1-5 and 7-11 were rejected under 35 U.S.C. §102(b), as being anticipated by Alexandrescu. Claims 1-12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Navab in view of Carol.

These rejections are respectfully traversed for the following reasons.

Each of dependent claims 1 and 7 in their previous form explicitly stated that the optical 3D sensor is mounted on the carrier support. As stated in the third full paragraph at page 10 of the present specification, the 3D sensor is defined as including a light source (such as a laser 21) and an optical detector (such as a CCD camera 23). Both the light source and the optical detector are mounted on the C-arm 8. The advantages of mounting the complete 3D sensor on the C-arm are extensively discussed throughout the present specification. By mounting the light source and the optical detector on the same carrier that is used to acquire x-ray images, movement of that carrier can thus also be used to acquire the 3D dataset that is an optical representation of a surface of the subject.

Each of claims 1 and 7 has been amended to make clear that the term "3D optical sensor" as used in those claims includes both the light source and the optical detector, and that both of those components are mounted on the same carrier that carries the components of the x-ray imaging system.

In the Alexandrescu reference, the only embodiment wherein the light source and the optical detector are both carried on the same carrier to which the imaging system is mounted, is the embodiment shown in Fig. 5. As explained at column 3, lines 1-18, the apparatus 11 includes a light transmitter 12 and a camera 13, shown

in Figure 2. The apparatus 11, however, is not used to obtain a 3D dataset representing a surface of the subject, but is only to identify the position of at least one object that is located in the room of the medical installation. This is also made clear because of the further statements in that passage, stating that other apparatuses, corresponding to apparatus 11, can be placed other locations within the installation room. As can be seen from each of Figures 3 and 4, even if the entire apparatus shown in Fig. 2, including the light transmitter 12, is mounted at the carrier arm of the imaging system, the light transmitter itself includes a rotatable mirror 20, and it is this rotatable mirror 20 that is used to move the light beam to identify the object. There is no teaching or suggestion in the Alexandrescu application to make use of the movement of the carrier arm itself for acquiring the 3D optical image.

In the Carol reference, there is no embodiment wherein a light source is disposed on a carrier that also carries the imaging system. In all embodiments of the Carol reference, the light source (light emitting diodes) are mounted directly on the patient, on suitable carriers that are affixed to, or rest on, the patient. In the Carol reference, only the optical camera is mounted on the same arrangement as the imaging system.

Each of independent claims 1 and 7 explicitly states that the supporting arrangement for the carrier support, that is used to move the carrier support relative to the examination subject for acquiring a series of 2D projections with the x-ray source and the radiation detector, is also used to move the carrier support relative to the examination subject to acquire the 3D image dataset conforming to at least a portion of the surface of the examination subject. No such arrangement or method is

disclosed or suggested in the Alexandrescu reference, nor the combination of Navab and Carol.

Editorial changes have been made in certain of the dependent claims, consistent with the above discussion. Typographical errors in the specification also have been corrected.

All claims of the application are therefore submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

Submitted by,

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